

## EAST Search History

## EAST Search History (Prior Art)

| Ref # | Hits | Search Query   | DBs   | Default Operator | Plurals | Time Stamp          |
|-------|------|--|---|------------------|---------|---------------------|
| L2    | 5166 | WAFER SAME SOLAR SAME CELLS\$1   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2010/10/21<br>14:40 |
| L3    | 113  | I2 SAME IMAGES\$1  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2010/10/21<br>14:41 |
| L4    | 14   | I3 SAME (MATCH\$3 OR COMPARS\$4)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2010/10/21<br>14:42 |
| L5    | 2    | L4 and (@ad<"20040202" or @rlad<"20040202" or @prad<"20040202" or<br>@ptad<"20040202") | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2010/10/21<br>14:42 |
| L6    | 2    | L4 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2010/10/21<br>14:42 |
| L7    | 1734 | 136/249,262,243,252,246.CCLS.  | USPAT   | OR               | ON      | 2010/10/21<br>15:41 |
| L8    | 1674 | 382/145,141.CCLS.  | USPAT   | OR               | ON      | 2010/10/21<br>15:41 |
| L9    | 2037 | 356/72,237.1,30.CCLS.  | USPAT   | OR               | ON      | 2010/10/21<br>15:42 |
| L10   | 8829 | 438/381,396,933,48,57,73,74,93,94,970,584,585,586.CCLS.                                | USPAT   | OR               | ON      | 2010/10/21<br>15:42 |

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| L11 | 6253 | 365/201,63.0CLS.   | USPAT | OR | ON | 2010/10/21 15:42 |
| L12 | 5009 | 429/185,162,210,90,217,218,1,337,59,157,223.0CLS.  | USPAT | OR | ON | 2010/10/21 15:42 |
| L13 | 9076 | 257/461,414,428,431,461,E27.089,E27.001,E27.01,E27.07,E27.081,E27.084,E27.085,E27.086,E27.089,E27.081,E27.098,E27.101,257,E27.122,E27.127,E27.128,E31.001,E31.11,E31.113,E31.114,E31.115.0CLS. | USPAT | OR | ON | 2010/10/21 15:42 |
| L14 | 1905 | 204/252,193,194,242,252.0CLS.  | USPAT | OR | ON | 2010/10/21 15:42 |
| L15 | 243  | L7 and WAFER SAME SOLAR SAME CELL\$1   | USPAT | OR | ON | 2010/10/21 15:43 |
| L17 | 22   | L15 and IMAGE\$1   | USPAT | OR | ON | 2010/10/21 15:45 |
| L18 | 21   | L17 and(MATCH\$3 OR COMPARS4)  | USPAT | OR | ON | 2010/10/21 15:45 |
| L19 | 18   | L18 and @ad<"20040202"   | USPAT | OR | ON | 2010/10/21 15:46 |
| L20 | 6    | L19 and(imaging or cod or camera or CMOS or IR)  | USPAT | OR | ON | 2010/10/21 15:51 |
| L21 | 0    | L20 and(producing or obtaining or genera\$3) and wafer adj image same cell adj image   | USPAT | OR | ON | 2010/10/21 15:53 |
| L22 | 0    | L8 and WAFER SAME SOLAR SAME CELL\$1   | USPAT | OR | ON | 2010/10/21 15:54 |
| L23 | 3    | L8 and WAFER and SOLAR and CELL\$1   | USPAT | OR | ON | 2010/10/21 15:54 |
| L24 | 5    | L9 and WAFER and SOLAR and CELL\$1   | USPAT | OR | ON | 2010/10/21 15:56 |
| L25 | 4    | L24 and(MATCH\$3 OR COMPARS4)  | USPAT | OR | ON | 2010/10/21 15:57 |
| L26 | 0    | L25 and(producing or obtaining or genera\$3) and wafer adj image same cell adj image   | USPAT | OR | ON | 2010/10/21 15:57 |
| L27 | 2    | L25 and(imaging or cod or camera or CMOS or IR)  | USPAT | OR | ON | 2010/10/21 15:58 |
| L28 | 297  | L10 and WAFER and SOLAR and CELL\$1  | USPAT | OR | ON | 2010/10/21 16:03 |
| L29 | 218  | L28 and(MATCH\$3 OR COMPARS4)  | USPAT | OR | ON | 2010/10/21 16:03 |

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| L30 | 0    | L29 and(producing or obtaining or genera\$3)and wafer adj image same cell adj image   | USPAT   | OR | ON | 2010/10/21 16:03 |
| L31 | 51   | L29 and(imaging or cod or camera or CMOS or IR)   | USPAT   | OR | ON | 2010/10/21 16:04 |
| L32 | 196  | L29 and(compar\$3 or match\$3)and(solar adj cell or cell crystallographic adj structure or wafer or ingot or cells or cell) | USPAT   | OR | ON | 2010/10/21 16:05 |
| L33 | 27   | L32 and(compar\$3 or match\$3)same wafer same(solar adj cell or cell)   | USPAT   | OR | ON | 2010/10/21 16:06 |
| L34 | 23   | L33 and(@ad<"20040202" or @lad<"20040202" or @prad<"20040202" or @ptad<"20040202")  | USPAT   | OR | ON | 2010/10/21 16:06 |
| L35 | 20   | L33 and @ad<"20040202"  | USPAT   | OR | ON | 2010/10/21 16:07 |
| L36 | 1    | L35 and(imaging or cod or camera or CMOS or IR)   | USPAT   | OR | ON | 2010/10/21 16:08 |
| S1  | 2124 | sheela chawan.Xa.   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/09 15:40 |
| S2  | 2338 | sheela chawan.Xp.   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/09 15:46 |
| S3  | 2    | S1 and wafer adj polishing  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/09 15:46 |
| S4  | 2    | S2 and wafer adj polishing  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/09 15:47 |
| S5  | 22   | S1 and wafer adj inspection   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/09 15:48 |

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| S6  | 22     | S2 and wafer adj inspection   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/09<br>15:48 |
| S7  | 156    | wafer adj pad and inspection  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/09<br>16:05 |
| S8  | 156    | wafer adj pad and inspection  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:04 |
| S9  | 27     | S9 and notch  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:04 |
| S10 | 337122 | crystallographic adj structure and wafer  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:09 |
| S11 | 966    | crystallographic adj structure and wafer  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:09 |
| S12 | 191    | crystallographic adj structure same wafer   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:09 |
| S13 | 150    | S12 and (@ad<"20040202" or @rlad<"20040202" or @prad<"20040202"<br>or @ptad<"20040202") | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:21 |

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| S14 | 117 | S12 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/10<br>16:21 |
| S15 | 16  | S14 and(solar adj cell or cell)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/10<br>16:22 |
| S16 | 16  | S15 and (compar\$3 or match\$3)and wafer and(solar adj cell or cell)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/10<br>16:23 |
| S17 | 41  | crystallographic adj structure and wafer and ingot  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/10<br>16:39 |
| S18 | 5   | S17 and(compar\$3 or match\$3)and wafer and(solar adj cell or cell)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/10<br>16:40 |
| S19 | 4   | S18 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/10<br>16:40 |
| S20 | 110 | ((("4352948") or ("6161054") or ("5203005") or ("5287472") or ("5292677") or ("5485097") or ("6243308") or ("4435498") or ("4471483") or ("4493055") or ("4519035") or ("4543444") or ("4898835") or ("4999689") or ("5019736") or ("5024972") or ("5252507") or ("5265847") or ("5315130") or ("5362666") or ("5393617") or ("5478363") or ("5491665") or ("5536964") or ("5552243") or ("5619419") or ("5624771") or ("5656392") or ("5657284") or ("5698453") or ("5698342") or ("5716459") or ("5808947") or ("5821160") or ("5851693") or ("5926419") or ("6040912") or ("RE36644") or ("6046078") or ("6140140") or ("6161213") or ("6225167") or ("6330819") or ("4304641") or ("4338480") or ("4353160") or ("4385198") or ("4400221") or ("4400868") or (".).pn.").PN. | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2010/03/10<br>16:43 |

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| S21 | 106  | \$20 and(@ad<"20040202" or @rlad<"20040202" or @prad<"20040202" or @ptad<"20040202")   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:43 |
| S22 | 106  | \$20 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:43 |
| S23 | 0    | \$22 and crystallographic adj structure and wafer and ingot  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:44 |
| S24 | 0    | \$22 and crystallographic adj structure and wafer and ingot  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>16:46 |
| S25 | 5    | \$22 and inspect\$3 and(crystallographic adj structure or wafer or ingot or cells or cell)                                   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:05 |
| S26 | 4    | \$25 and(compar\$3 or match\$3)and(solar adj cell or cell crystallographic adj structure or wafer or ingot or cells or cell) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:06 |
| S27 | 4    | \$26 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:07 |
| S28 | 4742 | crystallographic adj structure   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:10 |

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| S29 | 4328355 | wafer\$1 or semiconductor or solar adj cell or cell)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:11 |
| S30 | 98638   | S29 and inspect\$3 and(cells or cell)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:20 |
| S31 | 153527  | S29 and inspec\$3 and(cells or cell or wafer or memory)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:21 |
| S32 | 4742    | crystallographic adj structure  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:22 |
| S33 | 632     | S31 and S32   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:27 |
| S34 | 1       | S33 and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:28 |
| S35 | 3       | inspec\$3 and solar adj cell and matrix and convert\$3 and electricity and solar adj cell and treating and silicon adj wafers and ingot | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:32 |
| S36 | 2       | S35 and @ad:<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:33 |

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| S37 | 1  | \$35 and (compar\$3 or match\$3)and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:39 |
| S38 | 1  | \$32 and wafer adj image and cell adj image   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:40 |
| S39 | 17 | \$29 and (compar\$3 or match\$3)and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:40 |
| S40 | 3  | \$39 and @adk "20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:41 |
| S41 | 1  | \$39 and crystallographic adj structure   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:51 |
| S42 | 1  | \$39 and crystallographic adj structure and wafer adj structure and manufactured adj cell and crystallographic adj image and information and sufficient adj establish and correspondence and cell and wafer | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:58 |
| S43 | 1  | \$39 and crystallographic adj structure and wafer adj structure and manufactured adj cell   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:59 |
| S44 | 1  | crystallographic adj structure and wafer adj structure and manufactured adj cell  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>17:59 |

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| S45 | 2   | \$29 and crystallographic adj structure and manufactured adj cell                         | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:00 |
| S46 | 0   | \$45 and @adk:"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:01 |
| S48 | 607 | \$32 and inspec(\$3 and (cells or cell or memory))  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:06 |
| S49 | 1   | \$48 and wafer adj image and cell adj image   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:06 |
| S50 | 587 | \$48 and (compar(\$3 or match(\$3) and (memory or cell or memory adj cell))               | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:07 |
| S51 | 1   | \$48 and (compar(\$3 or match(\$3) same(memory or cell or memory adj cell) same wafer))   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:08 |
| S52 | 1   | \$50 and crystallographic adj structure and wafer adj structure and manufactured adj cell | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:09 |
| S53 | 1   | \$50 and wafer adj structure and manufactured adj cell                                    | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:09 |

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| \$54 | 1    | \$50 and manufactured adj cell  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:10 |
| \$55 | 297  | \$50 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:10 |
| \$56 | 12   | \$55 and(compar\$3 or match\$3)and wafer and(solar adj cell or cell)    | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:11 |
| \$57 | 13   | \$55 and inspect\$3 and wafer\$1 and(cells or cell or memory)           | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:12 |
| \$58 | 0    | \$55 and inspect\$3 adj wafer\$1 same(cells or cell or memory)          | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:13 |
| \$59 | 0    | \$55 and inspect\$3 adj wafer\$1 and(cells or cell or memory)           | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:13 |
| \$60 | 3559 | \$28 and(wafer\$1 or semiconductor or solar adj cell or cell or memory) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:14 |
| \$61 | 2    | \$60 and manufactured adj cell  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:14 |

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| S62 | 0    | S31 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:14 |
| S63 | 2    | S32 and manufactured adj cell  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:15 |
| S64 | 1818 | S32 and(wafer\$1 or semiconductor or memory)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:16 |
| S65 | 237  | S32 and(wafer\$1 or semiconductor or memory)and inspect\$3                                   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:16 |
| S66 | 119  | S35 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:16 |
| S67 | 12   | S66 and(compar\$3 or match\$3)and wafer and(solar adj cell or cell)                          | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:19 |
| S68 | 38   | S32 and inspect\$3 and(compar\$3 or match\$3)and wafer and(solar adj cell or cell)           | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:28 |
| S69 | 41   | S32 and inspect\$3 and(compar\$3 or match\$3)and wafer and(solar adj cell or cell or memory) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:29 |

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| S70 | 13    | \$89 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:29 |
| S71 | 85837 | analyze\$3 and (crystalline or crystallographic adj structure)                          | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:35 |
| S72 | 18    | S71 and manufactured adj cell   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:36 |
| S73 | 1     | S72 and (wafer\$1 or semiconductor or memory) and inspect\$3                            | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:36 |
| S74 | 1     | inspect\$3 and photovoltaic adj area and manufactured and crystalline adj cell          | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:43 |
| S75 | 0     | S74 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:44 |
| S76 | 0     | S72 and (imaging or cod or camera or CMOS or IR) and wafer adj image and cell adj image | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:46 |
| S77 | 0     | S71 and (imaging or cod or camera or CMOS or IR) and wafer adj image and cell adj image | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:47 |

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| S78 | 31037 | S71 and(imaging or cod or camera or CMOS or IR)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:47 |
| S79 | 8     | S78 and manufactured adj cell   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:47 |
| S80 | 2     | S79 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:48 |
| S81 | 2106  | S78 and(wafer\$1 or semiconductor\$1 or IC or intergrated adj circuit) and<br>inspec\$3 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:51 |
| S82 | 45    | S81 and(compar\$3 or match\$3)same(memory or cell or memory adj cell)<br>same wafer\$1  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:52 |
| S83 | 18    | S82 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>18:52 |
| S84 | 25    | S17 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>19:17 |
| S85 | 5     | S72 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>19:48 |

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| S86 | 118795 | (wafer\$1 or semiconductor\$1 or IC or intergrated adj circuit) and inspect\$3         | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>19:49 |
| S87 | 9      | S86 and(imaging or cod or camera or CMOS or IR) and wafer adj image and cell adj image | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>19:49 |
| S88 | 1      | S87 and @adk '20040202'  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>19:49 |
| S89 | 533    | crystallographic adj structure and(wafer or ingot) and section                         | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>20:15 |
| S90 | 161    | S89 and analyz\$3 and(crystalline or crystallographic adj structure)                   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>20:16 |
| S91 | 0      | S89 and analyz\$3 and(crystalline or crystallographic adj structure) same ingot        | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>20:16 |
| S92 | 0      | S90 and(imaging or cod or camera or CMOS or IR) and wafer adj image                    | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>20:17 |
| S93 | 120    | S90 and(imaging or cod or camera or CMOS or IR)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>20:17 |

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|------|-----|---|---|----|----|---------------------|
| S94  | 48  | S93 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>20:22 |
| S95  | 0   | S93 and etching and texturisation   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>20:59 |
| S96  | 7   | (wafer\$1 or semiconductor\$1 or IC or intergrated adj circuit)and etching and texturisation and inspect\$3 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:00 |
| S97  | 2   | S96 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:00 |
| S98  | 0   | S97 and(compar\$3 or match\$3)same(memory or cell or memory adj cell or die)same wafer\$1                   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:01 |
| S99  | 0   | S97 and(compar\$3 or match\$3)and(memory or cell or memory adj cell or die)and wafer\$1                     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:01 |
| S100 | 2   | S97 and(memory or cell or memory adj cell or die)and wafer\$1   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:01 |
| S101 | 161 | S89 and S90   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:05 |

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|------|------|---|---|----|----|---------------------|
| S102 | 0    | S101 and (wafer\$1 or semiconductor\$1 or IC or intergrated adj circuit) and etching and texturisation and inspect\$3 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:06 |
| S103 | 0    | S101 and etching and texturisation and inspect\$3   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:06 |
| S104 | 0    | S101 and etching and texturisation  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:07 |
| S105 | 1    | S99 and etching and texturisation   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:07 |
| S106 | 20   | S99 and solar adj cell  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:08 |
| S107 | 8    | S106 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:08 |
| S108 | 2468 | ingot and production adj process  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:10 |
| S109 | 523  | S108 and wafer\$3 and production adj process  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:11 |

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|------|-----|--|---|----|----|---------------------|
| S110 | 128 | S109 and cell and production adj process   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:11 |
| S111 | 1   | S110 and wafer adj position\$3   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:12 |
| S112 | 75  | S110 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:13 |
| S113 | 0   | S112 and cell adj inspect\$3   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:13 |
| S114 | 75  | S112 and(memory or cell or memory adj cell or die)and wafer\$1                           | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:14 |
| S115 | 0   | S114 and(imaging or cod or camera or CMOS or IR)and wafer adj image                      | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:14 |
| S116 | 12  | S114 and(imaging or cod or camera or CMOS or IR)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:14 |
| S117 | 10  | S116 and(compar\$3 or match\$3)and(memory or cell or memory adj cell or die)and wafer\$1 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:15 |

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|------|----|--|---|----|----|---------------------|
| S118 | 10 | S117 and @ad<"20040202"  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/10<br>21:15 |
| S119 | 93 | measur\$3 and polycrystalline adj wafer\$1   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:04 |
| S120 | 63 | photovoltaic adj devices and(slicing or dice\$3 or diced)and ingot   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:05 |
| S121 | 0  | defect adj characteriz\$3 and classificat\$3 and crystal adj growth and ingot                                    | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:07 |
| S122 | 54 | defect and classificat\$3 and crystal adj growth and ingot   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:08 |
| S123 | 0  | (defects or grain adj boundaries)and processing adj wafer\$1 and classificat\$3 and crystal adj growth and ingot | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:09 |
| S124 | 75 | (defects or grain adj boundaries)and processing adj wafer\$1 and crystal adj growth and ingot                    | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:10 |
| S125 | 3  | S119 and S120  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:10 |

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|------|----|--|---|----|----|---------------------|
| S126 | 0  | S124 and S125  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:11 |
| S127 | 0  | S125 and(defects or grain adj boundaries) and crystal adj growth and ingot | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:11 |
| S128 | 0  | S125 and(defects or grain adj boundaries)                                  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:12 |
| S129 | 0  | S125 and defects and crystal adj growth and ingot                          | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:12 |
| S130 | 10 | S120 and(imaging or cod or camera or CMOS or IR)                           | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:15 |
| S131 | 3  | S130 and @ad<"20040202"  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:16 |
| S132 | 0  | S120 and inspect\$3 adj defects and crystal adj growth and ingot           | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:29 |
| S133 | 0  | S120 and inspect\$3 and defects and crystal adj growth and ingot           | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:29 |

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|------|----|--|---|----|----|---------------------|
| S134 | 4  | S120 and inspect\$3  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:30 |
| S135 | 1  | S134 and(defects or grain adj boundaries)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:30 |
| S136 | 0  | S135 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:30 |
| S137 | 55 | S120 and(defects or variances or voids or defects or stacking adj faults or inclusions or impurities or grain or crystal adj boundaries) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:35 |
| S138 | 1  | S137 and(imaging or cod or camera or CMOS or IR)and surface adj wafer\$1   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:35 |
| S139 | 0  | S138 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:36 |
| S140 | 55 | S120 and S137  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:36 |
| S141 | 20 | S140 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:36 |

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| S142 | 13 | S141 and(compar\$3 or match\$3)and(wafer or ingot or cells or cell)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:44 |
| S143 | 11 | S141 and(compar\$3 or match\$3)same(wafer or ingot or cells or cell)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:46 |
| S144 | 11 | S143 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:46 |
| S145 | 0  | S141 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:49 |
| S146 | 0  | S141 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)                         | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:50 |
| S147 | 0  | S137 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)                         | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:50 |
| S148 | 0  | S120 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)                         | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:51 |
| S149 | 0  | S120 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)and surface adj wafer\$1 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:51 |

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| S150 | 0  | S119 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)and surface adj wafer\$1 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:52 |
| S151 | 0  | S124 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)and surface adj wafer\$1 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:52 |
| S152 | 0  | S120 and(imaging or cod or camera or CMOS or IR)and(compar\$3 or match\$3)and surface adj wafer\$1  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:53 |
| S153 | 5  | (imaging or cod or camera or CMOS or IR)and(compar\$3 or match\$3)and photovoltaic adj devices and(slicing or dice\$3 or diced)and ingot  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:54 |
| S154 | 2  | S163 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:54 |
| S155 | 2  | S154 and(defects or variances or voids or defects or stacking adj faults or inclusions or impurities or grain or crystal adj boundaries)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>10:55 |
| S156 | 4  | S120 and(wafer\$1 or semiconductor\$1 or IC or intergrated adj circuit) and inspect\$3  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:04 |
| S157 | 10 | S119 and(wafer\$1 or semiconductor\$1 or IC or intergrated adj circuit) and inspect\$3  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:04 |

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|------|---|--|---|----|----|---------------------|
| S158 | 0 | S166 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)and surface adj wafer\$1        | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:04 |
| S159 | 0 | S166 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)                                | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:05 |
| S160 | 0 | S167 and(imaging or cod or camera or CMOS or IR)and wafer adj image and cell adj image and(compar\$3 or match\$3)                                | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:05 |
| S161 | 0 | S167 and(imaging or cod or camera or CMOS or IR)and(compar\$3 or match\$3)and photovoltaic adj devices and(slicing or dice\$3 or diced)and ingot | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:05 |
| S162 | 0 | S167 and(imaging or cod or camera or CMOS or IR)and(compar\$3 or match\$3)and (cell adj solar or cell or memory or wafer\$1)                     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:06 |
| S163 | 4 | S167 and(imaging or cod or camera or CMOS or IR)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:06 |
| S164 | 4 | S163 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:06 |
| S165 | 1 | S164 and(defects or variances or voids or defects or stacking adj faults or inclusions or impurities or grain or crystal adj boundaries)         | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:07 |

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| S166 | 0 | S119 and produc\$4 and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:16 |
| S167 | 0 | S120 and produc\$4 and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:16 |
| S168 | 0 | S122 and produc\$4 and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:16 |
| S169 | 0 | S122 and(produc\$4 or obtaining)and wafer adj image and cell adj image                                     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:16 |
| S170 | 0 | S157 and(produc\$4 or obtaining)and wafer adj image and cell adj image                                     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:17 |
| S171 | 0 | S153 and(produc\$4 or obtaining)and wafer adj image and cell adj image                                     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:17 |
| S172 | 0 | S155 and(produc\$4 or obtaining)and wafer adj image and cell adj image                                     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:17 |
| S173 | 1 | crystallographic adj structure and(produc\$4 or obtaining)and wafer adj image and cell adj image and wafer | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:18 |

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| S174 | 1    | crystallographic adj structure and (produces\$4 or obtaining) and wafer adj image and (cell adj image or cells or cell or wafer or memory)                       | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:20 |
| S175 | 3130 | crystallographic adj structure and (produces\$4 or obtaining) and (cell adj image or cells or cell or wafer or memory)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:20 |
| S176 | 2    | S175 and photovoltaic adj devices and (slicing or dice\$3 or diced) and ingot  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:21 |
| S177 | 2    | S176 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:21 |
| S178 | 0    | S177 and (imaging or cod or camera or CMOS or IR or image)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:31 |
| S179 | 1586 | S175 and (imaging or cod or camera or CMOS or IR or image)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:31 |
| S180 | 0    | S179 and photovoltaic adj devices and (slicing or dice\$3 or diced) and ingot  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:32 |
| S181 | 0    | S179 and photovoltaic adj devices and (slicing or dice\$3 or diced) and (ingot or wafer\$1 or semiconductor\$1 or IC or intergrated adj circuit) and inspect \$3 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:33 |

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| S182 | 2   | S175 and photovoltaic adj devices and (slicing or dice\$3 or diced) and (ingot or wafer\$1 or semiconductor\$1 or IC or intergrated adj circuit)                  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:34 |
| S183 | 2   | S182 and @ad<"20040202"   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:34 |
| S184 | 2   | S163 and (defects or variances or voids or defects or stacking adj faults or inclusions or impurities or grain or crystal adj boundaries or grain adj boundaries) | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/11<br>11:37 |
| S185 | 850 | wafer\$1 adj identification   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:14 |
| S186 | 1   | S185 and etching and texturisation  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:14 |
| S187 | 348 | S185 and (etching or texturisation)   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:15 |
| S188 | 48  | wafer\$1 adj identification same(imaging or ood or camera or CMOS or IR)  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:16 |
| S189 | 12  | S188 and (etching or texturisation)   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:16 |

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| S190 | 0    | S189 and phosphorus adj doping   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:16 |
| S191 | 0    | S189 and phosphorus and doping   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:17 |
| S192 | 8    | S189 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:17 |
| S193 | 0    | S188 and phosphorus adj doping   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:21 |
| S194 | 1323 | phosphorus adj doping  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:21 |
| S195 | 872  | S194 and (etching or texturisation)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:21 |
| S196 | 1    | S195 and wafer\$1 adj identification and(imaging or ccd or camera or CMOS or IR) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:21 |
| S197 | 29   | S195 and identification and(imaging or ccd or camera or CMOS or IR)              | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:23 |

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| S198 | 16   | S197 and @ad<"20040202"    | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:23 |
| S199 | 0    | S198 and edge adj etching  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:23 |
| S200 | 14   | S198 and edge and etching  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:23 |
| S201 | 0    | S200 and oxide adj removal | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:24 |
| S202 | 10   | S200 and oxide and removal | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:24 |
| S203 | 1323 | phosphorus adj doping      | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:25 |
| S204 | 898  | S203 and @ad<"20040202"    | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:25 |
| S205 | 8    | S204 and oxide adj removal | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:26 |

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| S206 | 0   | S205 and antireflective adj coating   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:26 |
| S207 | 0   | S205 and screen adj print   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:27 |
| S208 | 1   | S203 and inspect\$3 adj wafer\$1 and(cells or cell or memory)                       | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:28 |
| S209 | 1   | S203 and wafer\$1 adj identification and(imaging or cod or camera or CMOS<br>or IR) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:29 |
| S210 | 566 | wafer\$1 and screen adj print   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:29 |
| S211 | 15  | S210 and antireflective adj coating   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:30 |
| S212 | 2   | S211 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:30 |
| S213 | 0   | S198 and wafer adj image and cell adj image   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:34 |

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| S214 | 1  | S203 and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:34 |
| S215 | 1  | determining adj quality and wafer adj production and cell adj production and process | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:36 |
| S216 | 12 | quality and wafer adj production and cell adj production and process                 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:37 |
| S217 | 1  | S216 and wafer adj image and cell adj image  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:37 |
| S218 | 2  | S216 and identification and(imaging or ccd or camera or CMOS or IR)                  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:37 |
| S219 | 0  | S218 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:38 |
| S220 | 8  | S216 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/12<br>12:40 |
| S221 | 22 | ingot adj production and wafer adj production  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>11:52 |

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| S222 | 10 | S221 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>11:53 |
| S223 | 0  | Ingot adj production and wafer adj production same(slicing or dice\$3 or diced) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:07 |
| S224 | 6  | Ingot adj production same(slicing or dice\$3 or diced)                          | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:07 |
| S225 | 4  | S224 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:07 |
| S226 | 0  | S224 and cell adj inspect\$3  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:12 |
| S227 | 1  | S221 and cell adj inspect\$3  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:12 |
| S228 | 0  | cell adj inspect\$3 and wafer adj production same(slicing or dice\$3 or diced)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:14 |
| S229 | 0  | cell adj inspect\$3 and wafer adj production and(slicing or dice\$3 or diced)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:14 |

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| S230 | 22  | cell adj inspect\$3 and(slicing or dice\$3 or diced)             | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:14 |
| S231 | 6   | S230 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>12:18 |
| S232 | 0   | cell adj inspect\$3 and imaging and(slicing or dice\$3 or diced) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>13:05 |
| S233 | 140 | image\$3 and cell adj image and(slicing or dice\$3 or diced)     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>13:06 |
| S234 | 0   | S233 and Ingot adj production same(slicing or dice\$3 or diced)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>13:06 |
| S235 | 0   | S233 and Ingot adj production and(slicing or dice\$3 or diced)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>13:07 |
| S236 | 2   | "6140140".pn.  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/16<br>14:52 |
| S237 | 23  | cell adj inspect\$3 and(slicing or dice\$3 or diced)             | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:19 |

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| S238 | 6  | S237 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:19 |
| S239 | 3  | S238 and (breakage or damage)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:21 |
| S240 | 64 | photovoltaic adj devices and(slicing or dice\$3 or diced) and ingot  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:23 |
| S241 | 55 | S240 and(defects or variances or voids or defects or stacking adj faults or inclusions or impurities or grain or crystal adj boundaries) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:23 |
| S242 | 20 | S241 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:24 |
| S243 | 3  | S242 and breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:25 |
| S244 | 2  | S237 and(compar\$3 or match\$3) and breakage   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:36 |
| S245 | 1  | S244 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:37 |

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| S246 | 4764 | crystallographic adj structure                | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:37 |
| S247 | 110  | S246 and (compar\$3 or match\$3) and breakage | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:37 |
| S248 | 65   | S247 and @ad< "20040202"                      | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:38 |
| S249 | 2    | "7144457".pn.                                 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:44 |
| S250 | 0    | S249 and (compar\$3 or match\$3) and breakage | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:44 |
| S251 | 0    | S249 and breakage                             | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:44 |
| S252 | 2    | "6465781".pn.                                 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:45 |
| S253 | 0    | S252 and breakage                             | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:45 |

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| S254 | 4764 | crystallographic adj structure  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/27<br>17:46 |
| S255 | 1    | S254 and wafer adj image and cell adj image   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/27<br>17:46 |
| S256 | 110  | ((("4352948") or ("6161054") or ("5203005") or ("5287472") or ("5292677") or ("5485097") or ("6243308") or ("4435498") or ("4471483") or ("4493055") or ("4519035") or ("4543444") or ("4898835") or ("4999689") or ("5019736") or ("5024972") or ("5252507") or ("5265847") or ("5315130") or ("5362666") or ("5393617") or ("5478363") or ("5491665") or ("5536964") or ("5552243") or ("5619419") or ("5624771") or ("5656392") or ("5657284") or ("5698453") or ("5698342") or ("5716459") or ("5808947") or ("5821160") or ("5851693") or ("5926419") or ("6040912") or ("F536644") or ("6046078") or ("6140140") or ("6161213") or ("6225167") or ("6330819") or ("4304641") or ("4338480") or ("4353160") or ("4385198") or ("4400221") or ("4400868") or (".,pn.")),<br>PN. | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2010/03/27<br>17:47 |
| S257 | 106  | S256 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/27<br>17:47 |
| S258 | 5    | S257 and inspect\$3 and (crystallographic adj structure or wafer or ingot or cells or cell)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/27<br>17:47 |
| S259 | 4    | S258 and (compar\$3 or match\$3) and (solar adj cell or cell crystallographic adj structure or wafer or ingot or cells or cell)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/27<br>17:47 |
| S260 | 5    | S257 and inspect\$3 and (crystallographic adj structure or wafer or ingot or cells)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2010/03/27<br>17:47 |

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| S261 | 0   | S260 and(compar\$3 or match\$3)and breakage                                    | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:48 |
| S262 | 0   | S260 and breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:48 |
| S263 | 142 | image\$3 and cell adj image and(slicing or dice\$3 or diced)                   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:48 |
| S264 | 6   | S263 and(compar\$3 or match\$3)and breakage                                    | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:48 |
| S265 | 2   | S264 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:49 |
| S266 | 110 | S246 and(compar\$3 or match\$3)and breakage                                    | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:50 |
| S267 | 65  | S266 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:50 |
| S268 | 66  | S267 cell adj image and wafer adj image and(compar\$3 or match\$3)and breakage | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:51 |

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| S269 | 66   | S267 cell adj image and wafer adj image same(compar\$3 or match\$3) same breakage   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:51 |
| S270 | 65   | S269 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:51 |
| S271 | 2    | "5667597".pn.   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:55 |
| S272 | 0    | S271 and breakage   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:55 |
| S273 | 2    | "6316832".pn.   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:56 |
| S274 | 2    | S273 and breakage   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:56 |
| S275 | 4764 | S264 cell adj image and wafer adj image and(compar\$3 or match\$3) and breakage     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:57 |
| S276 | 1    | S264 and cell adj image and wafer adj image and(compar\$3 or match\$3) and breakage | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:58 |

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| S277 | 2   | "5716459".pn.  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:58 |
| S278 | 0   | S277 and breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:59 |
| S279 | 2   | "5153444".pn.  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:59 |
| S280 | 0   | S279 and breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>17:59 |
| S281 | 535 | crystallographic adj structure and(wafer or ingot)and section                          | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:01 |
| S282 | 1   | S281 and cell adj image same wafer adj image same(compar\$3 or match\$3) same breakage | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:01 |
| S283 | 2   | "7144457".pn.  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:02 |
| S284 | 0   | S283 and(breakage or damaged)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:03 |

|      |     |  |   |    |    |                     |
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| S285 | 42  | S254 and inspect\$3 and (compar\$3 or match\$3) and wafer and (solar adj cell or cell or memory) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:08 |
| S286 | 13  | S285 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:08 |
| S287 | 0   | S286 and breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:08 |
| S288 | 535 | crystallographic adj structure and (wafer or ingot) and section                                  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:09 |
| S289 | 162 | S288 and analyz\$3 and (crystalline or crystallographic adj structure)                           | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:09 |
| S290 | 120 | S289 and (imaging or cod or camera or CMOS or IR)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:09 |
| S291 | 48  | S290 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:09 |
| S292 | 0   | S291 and (breakage or damaged)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:09 |

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| S293 | 2491 | ingot and production adj process   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |
| S294 | 525  | S293 and wafer\$3 and production adj process   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |
| S295 | 128  | S294 and cell and production adj process   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |
| S296 | 75   | S295 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |
| S297 | 75   | S296 and(memory or cell or memory adj cell or die)and wafer\$1                           | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |
| S298 | 12   | S297 and(imaging or cod or camera or CMOS or IR)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |
| S299 | 10   | S298 and(compar\$3 or match\$3)and(memory or cell or memory adj cell or die)and wafer\$1 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |
| S300 | 10   | S299 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |

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| S301 | 6 | S300 and (breakage or damaged) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:11 |
| S302 | 2 | S300 and breakage              | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:17 |
| S303 | 2 | "6140140".pn.                  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:31 |
| S304 | 1 | S303 and memory                | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>18:32 |
| S305 | 2 | "5757474".pn.                  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>21:51 |
| S306 | 0 | S305 and (breakage or damage)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/27<br>21:56 |
| S307 | 2 | "5757474".pn.                  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/29<br>10:00 |
| S308 | 2 | "6482661".pn.                  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/03/29<br>10:01 |

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|------|-------|--|---|----|-----|------------------|
| S309 | 111   | ((("4352948") or ("6161054") or ("5203005") or ("5287472") or ("5292677") or ("5485097") or ("6243308") or ("4435498") or ("4471483") or ("4493055") or ("4519035") or ("4543444") or ("4898835") or ("4999689") or ("5019736") or ("5024972") or ("5252507") or ("5265847") or ("5315130") or ("5362666") or ("5393617") or ("5478363") or ("5491665") or ("5536964") or ("5552243") or ("5619419") or ("5624771") or ("5656392") or ("5657284") or ("5698453") or ("5698342") or ("5716459") or ("5808947") or ("5821160") or ("5851693") or ("5926419") or ("6040912") or ("RE36644") or ("6046078") or ("6140140") or ("6161213") or ("6225167") or ("6330819") or ("4304641") or ("4338480") or ("4353160") or ("4385198") or ("4400221") or ("4400868") or ("pn.")); PN. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2010/03/29 10:02 |
| S310 | 0     | ("product\$3same solar adj cells").PN.   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2010/10/15 10:16 |
| S311 | 28478 | product\$3 same solar adj ells   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON  | 2010/10/15 10:16 |
| S312 | 9636  | product\$3 same solar adj cells  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON  | 2010/10/15 10:16 |
| S313 | 1     | S312 and establish\$3 adj correspondence same wafers same solar adj cell   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON  | 2010/10/15 10:18 |
| S314 | 3     | S312 and establish\$3 adj correspondence and wafers and solar adj cell   | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON  | 2010/10/15 10:18 |
| S315 | 106   | crystallographic adj structure and wafer\$1 and solar adj cells  | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | OR | ON  | 2010/10/15 10:20 |

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| S316 | 5    | S315 and matrix same solar adj cells   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:21 |
| S317 | 1    | S314 and solar adj cell and produced and treating and silicon adj wafer\$1     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:23 |
| S318 | 507  | solar adj cell and produced and treating and silicon adj wafer\$1              | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:23 |
| S319 | 34   | matrix same solar adj cells and produced and treating and silicon adj wafer\$1 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:24 |
| S320 | 2    | S319 and silicon adj wafer\$1 and cut\$3 and ingot                             | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:26 |
| S321 | 0    | S320 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:26 |
| S322 | 5030 | solar adj cells and silicon adj wafer\$1                                       | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:36 |
| S323 | 0    | solar adj cells and silicon adj wafer\$1 same solar adj cell adj traceability  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:36 |

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| S324 | 1     | solar adj cells and silicon adj wafer\$1 and solar adj cell adj traceability            | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:36 |
| S325 | 9636  | product\$3 same solar adj cells   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:38 |
| S326 | 8     | S325 and crystallographic adj structure and wafer\$1 and solar adj cells                | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:39 |
| S327 | 18    | solar adj cells and silicon adj wafer\$1 and traceability                               | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:48 |
| S328 | 5     | S327 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:48 |
| S329 | 72405 | (compar\$3 or match\$3)and wafer\$1 and(solar adj cells or cell)                        | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:57 |
| S330 | 2509  | (compar\$3 or match\$3)same wafer\$1 same(solar adj cells cell)                         | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:57 |
| S331 | 3     | S330 and matrix same solar adj cells and produced and treating and silicon adj wafer\$1 | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:58 |

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| S332 | 0   | S331 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>10:58 |
| S333 | 1   | image\$3 adj device and crystallographic adj structure and wafer and cell             | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:02 |
| S334 | 429 | crystallographic adj structure and wafer and cell                                     | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:03 |
| S335 | 5   | S334 and(compar\$3 or match\$3) same wafer\$1 same(solar adj cells or cell or matrix) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:03 |
| S336 | 3   | S335 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:03 |
| S337 | 0   | S336 and(image\$3 adj device or camera or ocd)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:23 |
| S338 | 106 | S334 and(image\$3 adj device or camera or ocd)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:23 |
| S339 | 32  | S338 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:23 |

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| S340 | 0   | S339 and(compar\$3 or match\$3) same wafer\$1 same(solar adj cells or cell or matrix)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:23 |
| S341 | 27  | S339 and(compar\$3 or match\$3) and wafer\$1 and(solar adj cells or cell or matrix)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:24 |
| S342 | 0   | S341 and matrix same solar adj cells and produced and treating and silicon adj wafer\$1  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:24 |
| S343 | 1   | S341 and matrix and solar adj cells and produced and treating and silicon adj wafer\$1   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:24 |
| S344 | 345 | S344 and(defects or variances or voids or defects or stacking adj faults or inclusions or impurities or grain or crystal adj boundaries or breakage) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:36 |
| S345 | 86  | S344 and(image\$3 adj device or camera or ocd)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:37 |
| S346 | 78  | S345 and(compar\$3 or match\$3) and wafer\$1 and(solar adj cells or cell or matrix)  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:37 |
| S347 | 0   | S346 and defect same breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:38 |

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| S348 | 6    | S346 and defect and breakage   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:38 |
| S349 | 25   | S346 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:39 |
| S350 | 0    | S344 and(compar\$3 or match\$3)and wafer\$1 and(solar adj cells or cell or matrix)and(software or program)and image adj recognition and detect adj defect and breakage | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:44 |
| S351 | 0    | (compar\$3 or match\$3)and wafer\$1 and(solar adj cells or cell or matrix)and (software or program)and image adj recognition and detect adj defect and breakage        | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:44 |
| S352 | 0    | S344 and(software or program)and image adj recognition and detect adj defect and breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:46 |
| S353 | 1    | (software or program)and image adj recognition and detect adj defect and breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:46 |
| S354 | 3350 | crystallographic adj structure and(produ\$4 or obtaining)and(cell adj image or cells or cell or wafer or memory)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:47 |
| S355 | 0    | S354 and(software or program)and image adj recognition and detect adj defect and breakage  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:48 |

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| S356 | 0 | S354 and image adj recognition and detect adj defect and breakage   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:48 |
| S357 | 0 | S334 and image adj recognition and detect adj defect and breakage   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:48 |
| S358 | 0 | inspec\$3 and(compar\$3 or match\$3)and wafer\$1 and(solar adj cells or cell or matrix)and(software or program)and image adj recognition and detect adj defect and breakage | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:53 |
| S359 | 0 | inspec\$3 adj solar adj cell same wafer\$1 adj cell   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:54 |
| S360 | 5 | inspec\$3 and solar adj cell same wafer\$1 adj cell   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:54 |
| S361 | 0 | S360 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>11:54 |
| S362 | 2 | "5257544".pn.   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>12:02 |
| S363 | 0 | S360 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>12:06 |

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| S364 | 2    | "6760472".pn.  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>12:21 |
| S365 | 2    | S364 and @ad<"20040202"  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/15<br>12:22 |
| S366 | 2    | "20080160648"  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>09:22 |
| S367 | 1    | S366 and software  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>09:22 |
| S368 | 1237 | micro adj defects and(semiconductors or wafer\$1)                                    | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:21 |
| S369 | 5    | S368 and Ingot adj production and(slicing or dice\$3 or diced)                       | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:22 |
| S370 | 2    | S369 and (@ad<"20040202" or @fad<"20040202" or @prad<"20040202" or @ptad<"20040202") | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:22 |
| S371 | 2    | S369 and @ad<"20040202"  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:23 |

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| S372 | 0   | S371 and inspect\$3 and (crystallographic adj structure or wafer or ingot or cells)   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:23 |
| S373 | 0   | S371 and (compar\$3 or match\$3) same wafer same (solar adj cell or cell)             | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:24 |
| S374 | 584 | S374 and micro adj defects and (semiconductors or wafer\$1)                           | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:25 |
| S375 | 162 | S374 and (compar\$3 or match\$3) and (memory or cell or memory adj cell)              | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:25 |
| S376 | 96  | S375 and @ad<"20040202"   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:26 |
| S377 | 46  | S374 and (compar\$3 or match\$3) same (memory or cell or memory adj cell)             | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:27 |
| S378 | 246 | S374 and (compar\$3 or match\$3) same (memory or cell or memory adj cell or wafer\$1) | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:28 |
| S379 | 145 | S378 and @ad<"20040202"   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:28 |

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| S380 | 2   | S379 and (compar\$3 or match\$3) same wafer same (solar adj cell or cell)   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:28 |
| S381 | 0   | S379 and (imaging or cod or camera or CMOS or IR) same wafer adj image<br>same cell adj image   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:32 |
| S382 | 0   | S374 and (imaging or cod or camera or CMOS or IR) same wafer adj image<br>same cell adj image   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:32 |
| S383 | 0   | S368 and (imaging or cod or camera or CMOS or IR) same wafer adj image<br>same cell adj image   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:33 |
| S384 | 650 | detect\$3 and micro adj defects and (semiconductors or wafer\$1 or silicon<br>or insulator adj wafer\$1 or polycrystalline adj silicon) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:37 |
| S385 | 650 | detect\$3 and micro adj defects and (semiconductors or wafer\$1 or silicon or<br>insulator adj wafer\$1 or polycrystalline adj silicon) | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:37 |
| S386 | 313 | S385 and @ad<"20040202"   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:37 |
| S387 | 0   | S386 and (imaging or cod or camera or CMOS or IR) same wafer adj image<br>same cell adj image   | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:38 |

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| S388 | 124 | S386 and(imaging or cod or camera or CMOS or IR)captur\$4 same wafer adj image same cell adj image | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:39 |
| S389 | 61  | S388 and(breakage or damaged)  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:41 |
| S390 | 0   | S389 and producing same wafer adj image same cell adj image  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:44 |
| S391 | 0   | S385 and producing same wafer adj image same cell adj image  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:44 |
| S392 | 0   | S385 and crystallographic adj structure and wafer and ingot  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:45 |
| S393 | 44  | crystallographic adj structure and wafer and ingot   | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:46 |
| S394 | 19  | S393 and(imaging or cod or camera or CMOS or IR)captur\$4 same wafer adj image same cell adj image | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:46 |
| S395 | 0   | S394 and producing same wafer adj image same cell adj image  | US-PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:46 |

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| S396 | 0    | S394 and producing and wafer adj image same cell adj image                             | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:46 |
| S397 | 0    | S394 and (producing or obtaining or general\$3)and wafer adj image same cell adj image | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:47 |
| S398 | 1    | S394 and (compar\$3 or match\$3) same wafer same(solar adj cell or cell)               | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:47 |
| S399 | 6    | S394 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:48 |
| S400 | 0    | S399 and (compar\$3 or match\$3) same wafer same(solar adj cell or cell)               | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:48 |
| S401 | 0    | S399 and (compar\$3 or match\$3)and wafer and(solar adj cell or cell)                  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>11:48 |
| S402 | 0    | S398 and @ad<"20040202"  | US_PGPUB;<br>USPAT; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2010/10/21<br>12:56 |
| S403 | 1734 | 136/249,262,243,252,246.CCLS.  | USPAT   | OR | ON | 2010/10/21<br>13:05 |
| S404 | 1674 | 382/145,141.CCLS.  | USPAT   | OR | ON | 2010/10/21<br>13:06 |
| S405 | 2037 | 356/72,237,1,30.CCLS.  | USPAT   | OR | ON | 2010/10/21<br>13:09 |

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| S406 | 8829 | 438/381,396,933,48,57,73,74,93,94,970,584,585,586.CCLS.  | USPAT | OR | ON | 2010/10/21<br>13:12 |
| S407 | 6253 | 365/201,63.CCLS.   | USPAT | OR | ON | 2010/10/21<br>13:14 |
| S408 | 5009 | 429/185,162,210,90,217,218,1,337,59,157,223.CCLS.  | USPAT | OR | ON | 2010/10/21<br>13:17 |
| S410 | 9076 | 257/461,414,428,431,461,E27.089,E27.001,E27.009,E27.01,E27.07,E27.081,<br>E27.084,E27.085,E27.086,E27.089,E27.081,E27.098,E27.101,257,E27.122,<br>E27.127,E27.128,E31.001,E31.11,E31.113,E31.114,E31.115.CCLS. | USPAT | OR | ON | 2010/10/21<br>13:27 |
| S411 | 1905 | 204/252,193,194,242,252.CCLS.  | USPAT | OR | ON | 2010/10/21<br>13:31 |

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